AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (Original) A method for determining a zeta potential generated between a channel wall and a fluid, the method comprising:

(a) injecting an electrolyte solution into a first inlet of a T channel, which is provided with first and second inlet electrodes and a grounded outlet electrode, and a mixed solution of the electrolyte solution and a fluorescent dye into a second channel of the T channel and maintaining a steady-state of the two solutions;

(b) applying a direct current electric field from the first and second electrodes to the outlet electrode to form an interface between the electrolyte solution and the mixed solution;

(c) applying an alternating current electric field from one of the two inlet electrodes to the outlet electrode to oscillate the interface; and

(d) measuring an amplitude of oscillation of the interface and determining the zeta potential from the standard relationship between the zeta potential and the amplitude.

2. (Original) The method according to claim 1, wherein the amplitude of oscillation of the interface is measured using a fluorescence microscope.

3. (Original) The method according to claim 1, wherein the direct current electric field is in the range of 100 to 2,000 V/cm.

4. (Original) The method according to claim 1, wherein the frequency of the alternating current electric field is in the range of 1 to 10 Hz.

5. (Canceled)

6. (Canceled)